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## INFORMATION DISCLOSURE STATEMENT

## IN AN APPLICATION

(Use several sheets if necessary)

Docket Number: 510015-213	Application Number: 09/292,437
Applicant: Schneewind et al.	

Group Art Unit: +1643 1645

	•		. 1	U.S. PATENT DOCUMENTS				
EXAMINER INITIAL	DOC	UMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	1							
			FOI	REIGN PATENT DOCUMEN	ITS			
	DOC	CUMENT NO. DATE COUNTRY CLASS SUBCLASS TRANSI			LATION			
							YES	NO
		ОТІ	HER DOCUMENT	S (Including Author, Title, Dat	e, Pertinent Pages, E	tc.)		
~	1	G.P. Smith, " 228:1315-13		Phage: Novel Expression Vec	tors that Display Clo	oned Antigens on the	Virion Surface	" Science
~	2		J.A. Javitch et al., "Mapping the Binding Site Crevice of the Dopamine D2 Receptor by the Substituted-Cysteine Accessibility Method," Neuron 14: 825-831 (1995)					
$\sim$	3		M.H. Akabas & A. Karlin, "Identification of Acetylcholine Receptor Channel-Lining Residues in the M1 Segment of the α-Subunit," <u>Biochemistry</u> 34: 12496-12500 (1995)					
~	4	D.J. Smith et 771 (1975)	D.J. Smith et al., "Simple Alkanethiol Groups for Temporary Blocking of Sulfhydryl Groups of Enzymes," Biochemistry 14: 766-771 (1975)					
w	5		W.N. Valentine & D.E. Paglia, "Effect of Chemical Modification of Sulfhydryl Groups of Human Erythrocyte Enzymes," Am. J. Hematol. 11: 111-124 (1981)					
~	6	R.P. Novick,	R.P. Novick, "Genetic Systems in Staphylococci," Meth. Enzymol. 204: 587-636 (1991)					
$\sim$	7	O. Schneewin	O. Schneewind et al., "Sorting of Protein A to the Staphylococcal Cell Wall," Cell 70: 267-281 (1992)					
~	8	O. Schneewin	O. Schneewind et al., "Cell Wall Sorting Signals in Surface Proteins of Gram-Positive Bacteria," EMBO J. 12:4803-4811 (1993)					
$\sim$	9		E. Dufour et al., "Peptide Aldehydes and Nitriles as Transition State Analog Inhibitors of Cysteine Proteases," Biochemistry 34: 9136-9143 (1995)					
~	10	J. O. Westeri	J. O. Westerik & R. Wolfenden, "Aldehydes as Inhibitors of Papain," J. Biol. Chem. 247: 8195-8197 (1972)					
N	11	1 -	L. Björck et al., "Bacterial Growth Blocked by a Synthetic Peptide Based on the Structure of a Human Proteinase Inhibitor," Nature 337: 385-386 (1989)					
~	12		P.A. Bartlett & C.K. Marlowe, "Phosphonamidates as Transition-State Analogue Inhibitors of Thermolysin," <u>Biochemistry</u> 22: 4618-4624 (1983)					
~	13	R.F. Pratt, "I	R.F. Pratt, "Inhibition of a Class C β-Lactamase by a Specific Phosphonate Monoester," Science 246: 917-919 (1989)					
~	14		J.V. Moroney et al., "The Distance Between Thiol Groups in the γ Subunit of Coupling Factor 1 Influences the Proton Permeability of Thylakoid Membranes," J. Bioenerget. Biomembr. 14: 347-359 (1982)					
~	15		A.N. Chatterjee & J.T. Park, "Biosynthesis of Cell Wall Mucopeptide by a Particulate Fraction From Staphylococcus Aureus," Proc Natl. Acad. Sci. USA 51: 9-16 (1964)					
~	16		M. Matsuhashi et al., "Incorporation of Glycine into the Cell Wall Glycopeptide in Staphylococcus Aureus: Role of sRNA and Lipi Intermediates," Proc. Natl. Acad. Sci. USA 54: 587-594 (1965)					
~	17	D.B. Smith & K.S. Johnson, "Single-Step Purification of Polypeptides Expressed in <i>Escherichia coli</i> as Fusions with Glutathione S-Transferase," Gene 67: 31-40 (1988)						

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EXAMINER MAVE NAVABOO	DATE CONSIDERED 7/19/01

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Applicant: Schneewind et al.

Group Art Unit: 1643 1645

~	18	<ul> <li>P.Z. Wang et al., "Nucleotide sequence of β-lactamase regulatory genes from staphylococcal plasmid p1258," Nucl. Acids Res. 19:4000- (1991)</li> <li>P. Recsei et al., "Cloning, Sequence, and Expression of the Lysostaphin Gene from Staphylococcus simulans," Proc. Natl. Acad. Sci.</li> </ul>
$\sim$	19	P. Persei et al. "Cloning Sequence and Expression of the Lycostanhin Gene from Stanhulacoccus simulans." Proc. Natl. Acad. Sci.
		USA 84:1127-1131 (1987)
~	20	K. Brocklehurst et al., "Cysteine Proteases," in New Comprehensive Biochemistry, Volume 16: Hydrolytic Enzymes (A. Neuberger & K. Brocklehurst, eds., Elsevier, New York, 1987), ch. 2, pp. 39-158
~	21	B.L.M. de Yonge et al., "Peptidoglycan Composition of a Highly Methicillin-resistant Staphylococcus aureus Strain," <u>J. Biol. Chem.</u> 267: 11248- (1992)
~	22	U. Kopp et al., "Staphylococcal Peptidoglycan Interpeptide Bridge Biosynthesis: A Novel Antistaphylococcal Target?" Microb. Drug Resist. 2: 29-41 (1996)
~	23	D. Boothby et al., "A Rapid, Quantitative, and Selective Estimation of Radioactively Labeled Peptidoglycan in Gram-Positive Bacteria," Anal. Biochem. 44: 645-653 (1971)
~	24	H. Ton-That et al., "Anchor Structure of Staphylococcal Surface Proteins," J. Biol. Chem. 272: 22285-22292 (1997)
~	25	K. Yokogawa et al., "Mutanolysin, Bacteriolytic Agent for Cariogenic Streptococci: Partial Purification and Properties," <u>Antimicrob. Agents Chemother.</u> 6: 156-165 (1974)
~	26	W.W. Navarre et al., "Multiple Enzymatic Activities of the Murein Hydrolase from Staphylococcal Phage \$11," J. Biol. Chem. 274:15847-15855 (1999)
	27	W.W. Navarre et al., "Anchor Structure of Staphylococcal Surface Proteins," J. Biol. Chem. 273: 29135-29142 (1998)
~	28	D.J. Smith et al., "Simple Alkanethiol Groups for Temporary Blocking of Sulfhydryl Groups of Enzymes," <u>Biochemistry</u> 14: 766-771 (1975)
~	29	W. W. Navarre and O. Schneewind, "Surface Proteins of Gram-Positive Bacteria and Mechanisms of Their Targeting to the Cell Wall Envelope," Microbiol. Mol. Biol. Rev. 63: 174-229 (1999)
~	30	M.K. Yeung et al., "Identification of a Gene Involved in Assembly of Actinomyces naeslundii T14V Type 2 Fimbriae," J. Bacteriol 66: 1482-1491 (1998)
~	31	M. K. Yeung and J. O. Cisar, "Sequence Homology between the Subunits of Two Immunologically and Functionally Distinct Types of Fimbriae of Actinomyces spp.," J. Bacteriol. 172: 2462-2468 (1990)
~	32	D.B. Oliver et al., "Azide-resistant mutants of <i>Escherichia coli</i> alter the SecA protein, an azide-sensitive component of the protein export machinery," Proc. Natl. Acad. Sci. USA 87: 8227-8231 (1990)
~	33	I. van de Rijn and V.A. Fischetti, "Immunochemical Analysis of Intact M Protein Secreted From Cell Wall-Less Streptococci," <u>Infect. Immun.</u> 32: 86-91 (1981)
	34	J. Movitz, "Formation of Extracellular Protein A by Staphylococcus aureus," Eur. J. Biochem. 68: 291-299 (1976)
~	35	P. Lawrence and J. L. Strominger, "Biosynthesis of the Peptidoglycan of Bacterial Cell Walls," J. Biol. Chem. 245: 3653-3659 (1970)
~	36 .	J.W. Kozarich et al., "Hydroxylaminolysis of Pencillin Binding Components Is Enzymatically Catalyzed," <u>J. Biol. Chem.</u> 252: 7525-7529 (1977)
	37	G.T. Wang et al., <u>Tetrahedron Lett.</u> 31: 6493-6496 (1990)
~	38	E.D. Matayoshi et al., "Novel Fluorogenic Substrates for Assaying retroviral Proteases by Resonance Energy Transfer," Science 247: 954-958 (1989)
	39	R. Pathak et al., "Sulfhydryl Modification of the Yeast Wbp1p Inhibits Oligosaccharyl Transferase Activity," Biochemistry 34:

EXAMINER MARK NAVARRO DATE CONSIDERED 7/19/01	EXAMINER MARK NAVARRO	DATE CONSIDERED	7/19/01		
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m cons		4179-4185 (1995
	40	W.W. Navarre & O. Schneewind, "Proteolytic Cleavage and Cell Wall Anchoring at the LPXTG Motif of Surface Proteins in Gram-Positive Bacteria," Mol. Microbiol. 14: 115-121 (1994)
~	41	C.A. Schindler & V.T. Schuhardt, "Lysostaphin: A New Bacteriolytic Agent for the Staphylococcus," Proc. Natl. Acad. Sci. USA 51: 414-421 (1964)
~	42	O. Schneewind et al., "Structure of the Cell Wall Anchor of Surface Proteins in Staphylococcus aureus," Science 268: 103-106 (1995)
~	43	O. Schneewind et al., "Cell Wall Sorting Signals in Surface Protein of Gram-Negative Bacteria," EMBO J. 12: 4803-4811 (1993)
2	44	I. van de Rijn & R.E. Kessler, "Growth Characteristics of Group A Streptococci in a New Chemically Defined Medium," <u>Infect. Immun.</u> 27: 444-448 (1980)
~	45	W.W. Navarre et al., "Cell Wall Sorting of Lipoproteins in Staphylococcus aureus," J. Bacteriol. 178: 441-446 (1996)
~	46	S.R. Talay et al., "Domain Structure and Conserved Epitopes of Sfb Protein, the Fibronectin-Binding Adhesin of Streptococcus pyogenes," Mol. Microbiol. 13: 531-539 (1994)
~	47	M.P. Schreuder et al., "Targeting of a Heterologous Protein to the Cell Wall of Saccharomyces cerevisiae," Yeast 9: 399-409 (1993)
$\sim$	48	J.A. Ogier et al., "A 40-Kilodalton Cell Wall Protein-Coding Sequence Upstream of the sr Gene of Streptococcus mutans," Infect.  Immun. 59: 1620-1626 (1991)
2	49	A. Rambukkana et al., "Identification and Characterization of Epitopes Shared Between the Mycobacterial 65-Kilodalton Heat Shock Protein and the Actively Secreted Antigen 85 Complex: Their In Situ Expression on the Cell Wall Surface of <i>Mycobacterium leprae</i> ," Infect. Immun. 11: 4517-4527 (1992)



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